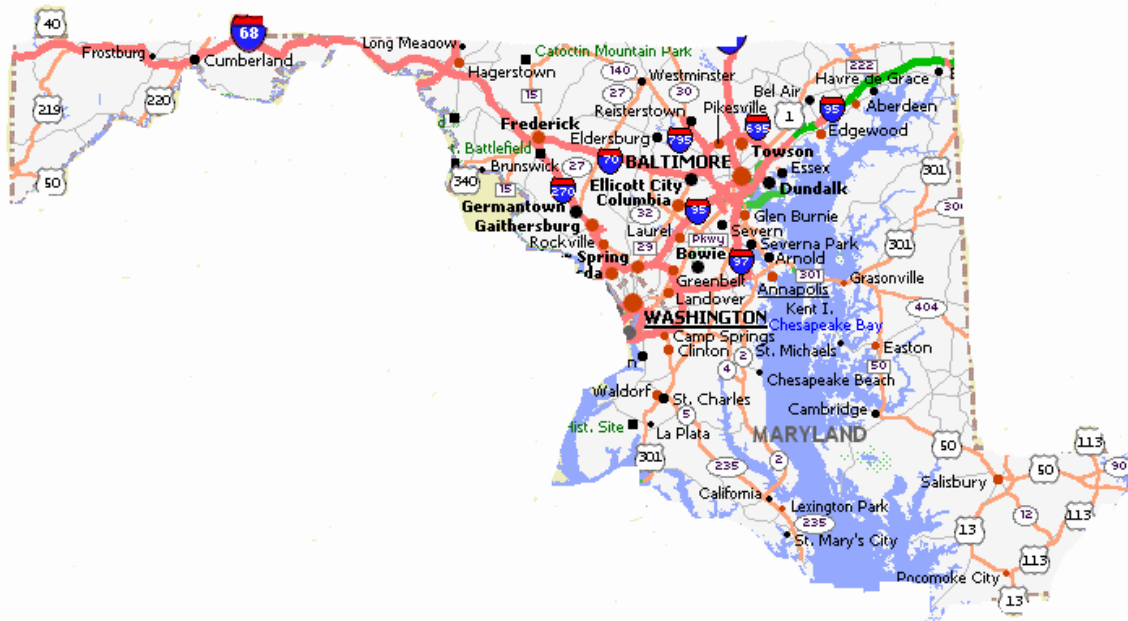


State Data System

MARYLAND

Cross Reference Document 1993-2001



National Highway Traffic Safety Administration
National Center for Statistics and Analysis
400 Seventh Street, SW
Washington, DC 20590

REFERENCES:

The Maryland Automated Accident Reporting System (MAARS) Instruction and Reference Manual, Central Records Division, Maryland State Police, January 1993.

NCSA CRASH FILE VARIABLE LIST

The variables listed below are those available in the 1993 MAARS Manual.

<u>NCSA</u> <u>Variable Description</u>	<u>NCSA</u> <u>SAS Variable Name</u>	<u>MD</u> <u>Variable Description</u>
Accident Occurred In	ACC_OCC	Lane
Collision Type	COL_TYPE	VEH-VEH Collision Type
Construction Zone	CONSTRCT	Construction or Main- tenance Zone
County Code	COUNTY	County
Date of Accident	ACC_DATE	Accident Date
Day of Week	WEEKDAY	
First Harmful Event	EVENT1	First Harmful Event 1
Interchange Ramp Direction	RAMP	Ramp Number Direc- tion
Intersection Related	INT_REL	Junction
Light Condition	LIGHT	Light
Municipal Code	MUN_CODE	Code and Name of Mun- icipality
Number of Fatalities	NUM_FAT	
Number of Injuries	NUM_INJ	
Number of Non-Occupants Involved	NUM_NOCC	
Number of Vehicles Involved	NUM_VEH	
Object Struck 1	OBJECT1	Fixed Object 1
Pedestrian Traffic Control 1	TRA_CON1	
Report Number	CASENO	
Road Condition	RD_CON1	Road Condition
Road Surface Condition	RD_SUR1	Surface Condition
Road Type	RD_TYPE	Road Division
Roadway Character	RD_CHAR1	Road Character
Subsequent Event 1	EVENT2	Harmful Event 2
Time of Accident	TIME	Accident Time
Weather	WEATHER	Weather

NCSA CRASH FILE

MD FIELDS USED

<u>NCSA SAS</u> <u>Variable Description</u>	<u>NCSA SAS</u> <u>Variable Name</u>	<u>MD</u> <u>Variable Name</u>	<u>MD</u> <u>Record Type</u>
Accident Severity	SEVERITY	ACC-SEVER	1
Accident Occurred In	ACC_OCC	LANE	1
Collision Type	COL_TYPE	COLLISION-TYPE	1
Construction Zone	CONSTRCT	C-M-ZONE	1
County Code	COUNTY	COUNTY	1
Date of Accident	ACC_DATE	ACC-DATE	1
Day of Week	WEEKDAY	ACC-DAY	1
First Harmful Event	EVENT1	EVENT1	1
Interchange Ramp Direction	RAMP	RAMP-MOVEMENT	1
Intersection Related	INT_REL	JUNCTION	1
Light Condition	LIGHT	LIGHT	1
Municipal Code	MUN_CODE	MUNI-CODE	1
Number of Fatalities	NUM_FAT	NUM-KILLED	1
Number of Injuries	NUM_INJ	NUM-INJURY	1
Number of Non-Occupants Involved	NUM_NOCC	NUM-PEDS	1
Number of Vehicles Involved	NUM_VEH	NUM-VEH	1
Object Struck 1	OBJECT1	FIX-OBJ	1
Pedestrian Traffic Control 1	TRA_CON1	SIGNAL	1
Report Number	CASENO	REPORT-NO	1
Road Condition	RD_CON1	RD-COND	1
Road Surface Condition	RD_SUR1	SURF-COND	1
Road Type	RD_TYPE	RD-DIV	1
Roadway Character	RD_CHAR1	RD-CHAR	1
Subsequent Event 1	EVENT2	EVENT2	1
Time of Accident	TIME	ACC-TIME	1
Weather	WEATHER	WEATHER	1

NCSA VEHICLE FILE VARIABLE LIST

<u>NCSA</u> <u>Variable Description</u>	<u>NCSA</u> <u>SAS Variable Name</u>	<u>MD</u> <u>Variable Description</u>
Cargo Body	CAGOBODY	(Commercial) Body Type
Commercial Driver License	CDL	CDL
Direction of Travel	DIR_TRVL	Direction Going
Driverless	DRVLESS	
Driver's License State	DLIC_ST	State
Fire	FIRE	
Hazardous Material Released	CAGOSPIL	Hazardous Materials Spill
Hazardous Material Type	HAZ_TYPE	
Hit and Run	HIT_RUN	
Initial Point of Impact	IMPACT	1 st Impact Type
Main Point of Impact	IMPACTM	
Number of Occupants	NUMOCC	
Parked	PARKED	
Report Number	CASENO	
Speed Limit	SPDLIM	Speed Limit
Trailer Type 1	TRAILER1	
Trailer Type 2	TRAILER2	
Trailer Type 3	TRAILER3	
Type of Driver's License	LIC_TYPE	Class
U.S. DOT Number	USDOTNUM	U.S. DOT Number
Vehicle Damage Area 1	VEH_DAM1	
Vehicle Damage Area 2	VEH_DAM2	
Vehicle Damage Area 3	VEH_DAM3	
Vehicle Damage Severity	DAM_SEV	Damage Extent
Vehicle Identification Number	VIN	Vehicle ID Number
Vehicle License State	VLIC_ST	YR Registration # & State
Vehicle Make	MAKE	Year & Make of Vehicle
Vehicle Maneuver	VEH_MAN1	Movement
Vehicle Model	MODEL	Model
Vehicle Most Harmful Event	VEVENT1	VEH Most Harmful Event
Vehicle Number	VEHNO	Unit #
Vehicle Type	VEH_TYPE	Body Type
Vehicle Year	MOD_YR	Year & Make of Vehicle

NCSA VEHICLE FILE

MD FIELDS USED

<u>NCSA SAS</u> <u>Variable Description</u>	<u>NCSA SAS</u> <u>Variable Name</u>	<u>MD</u> <u>Variable Name</u>	<u>MD</u> <u>Record Type</u>
Cargo Body	CAGOBODY	CV-BODY	2
Commercial Driver License	CDL	DR-CDL	2
Direction of Travel	DIR_TRVL	GOING	2
Driverless	DRVLESS	DRIVERLESS	2
Driver's License State	DLIC_ST	DR-STATE	2
Fire	FIRE	FIRE	2
Hazardous Material Released	CAGOSPIL	HAZMAT-SPILL	2
Hazardous Material Type	HAZ_TYPE	CV-HZM-NUM	2
Hit and Run	HIT_RUN	VEH-HITRUN	2
Initial Point of Impact	IMPACT	1ST -IMPACT	2
Main Point of Impact	IMPACTM	MAIN-IMPACT	2
Number of Occupants	NUMOCC	NUM-OCC	2
Parked	PARKED	PARKED	2
Report Number	CASENO	DR-REPORT-NO	2
Speed Limit	SPDLIM	SPEED-LIMIT	2
Trailer Type 1	TRAILER1	TOWED-VEH1	2
Trailer Type 2	TRAILER2	TOWED-VEH2	2
Trailer Type 3	TRAILER3	TOWED-VEH3	2
Type of Driver's License	LIC_TYPE	DR-CLASS	2
U.S. DOT Number	USDOTNUM	CV-DOT-NUM	2
Vehicle Damage Area 1	VEH_DAM1	AREA-DAM-1	2
Vehicle Damage Area 2	VEH_DAM2	AREA-DAM-2	2
Vehicle Damage Area 3	VEH_DAM3	AREA-DAM-3	2
Vehicle Damage Severity	DAM_SEV	DAMAGE	2
Vehicle Identification Number	VIN	VIN	2
Vehicle License State	VLIC_ST	PLATE-STATE	2
Vehicle Make	MAKE	VEH-MAKE	2
Vehicle Maneuver	VEH_MAN1	MOVEMENT	2
Vehicle Model	MODEL	VEH-MODEL	2
Vehicle Most Harmful Event	VEVENT1	MST-HARM-EVENT	2
Vehicle Number	VEHNO	DR-UNIT	2
Vehicle Type	VEH_TYPE	BODY-TYPE	2
Vehicle Year	MOD_YR	VEH-YEAR	2

NCSA PERSON FILE VARIABLE LIST

<u>NCSA</u> <u>Variable Description</u>	<u>NCSA</u> <u>SAS Variable Name</u>	<u>MD</u> <u>Variable Description</u>
Age	AGE	Age
Alcohol/Drug Use	ALC_DRUG	Substance Use Detected
Alcohol Test Results	TST_RES1	BAC TEST Result
Driver/Pedestrian Condition	PERCOND	Condition
Driver/Pedestrian Date of Birth	DOB	Date of Birth
Driver/Ped Contributing Circumstance 1	CON_CIR1	Contributing Circumstances #1-4
Driver/Ped Contributing Circumstance 2	CON_CIR2	
Driver/Ped Contributing Circumstance 3	CON_CIR3	
Driver/Ped Contributing Circumstance 4	CON_CIR4	
Ejection	EJECT	Ejection
Injury Severity	INJ	Injury Severity
Pedestrian Action	PED_ACT	
Pedestrian Location	PED_LOC	Ped Location
Pedestrian/Pedalcyclist	PPPO	Ped Type
Pedestrian Traffic Control	TR_FUNC1	
Pedestrian Visibility	CTH_CLR	Ped Visibility
Person Fault Code	PER_FLT	At Fault
Report Number	CASENO	
Restraint Device	REST1	Safety Equipment Used
Restraint Device Problem	RES_PROB	Driver Equipment Problem
Seat Position	POS	Seat Position
Sex	SEX	Sex
Test Type	TEST1	Test Administered
Vehicle Number	VEHNO	

NCSA PERSON FILE MD FIELDS USED

Note: In some cases several Maryland variables were combined into one NCSA SAS variable, e.g., DR-AGE/PED-AGE/OCC-AGE.

<u>NCSA SAS</u> <u>Variable Description</u>	<u>NCSA SAS</u> <u>Variable Name</u>	<u>MD</u> <u>Variable Name</u>	<u>MD</u> <u>Record Type</u>
Age	AGE	DR-AGE	2
		PED-AGE	3
		OCC-AGE	4
Alcohol/Drug Use	ALC_DRUG	DR-SUBST-USE	2
		PED-SUBST-USE	3
Alcohol Test Results	TST_RES1	DR-BAC	2
		PED-BAC	3
Driver/Pedestrian Condition	PERCOND	DR-CONDITION	2
		PED-CONDITION	3
Driver/Pedestrian Date of Birth	DOB	DR-DOB	2
Driver/Ped Contributing Circumstance 1	CON_CIR1	VEH-CONTRIB1	2
		PED-CONTRIB1	3
Driver/Ped Contributing Circumstance 2	CON_CIR2	VEH-CONTRIB2	2
		PED-CONTRIB2	3
Driver/Ped Contributing Circumstance 3	CON_CIR3	VEH-CONTRIB3	2
		PED-CONTRIB3	3
Driver/Ped Contributing Circumstance 4	CON_CIR4	VEH-CONTRIB4	2
		PED-CONTRIB4	3
Ejection	EJECT	DR-EJECTION	2
		OCC-EJECTION	4
Injury Severity	INJ	DR-INJ-SEVER	2
		PED-INJ-SEVER	3
		OCC-INJ-SEVER	4
Pedestrian Action	PED_ACT	PED-MOVEMENT	3
Pedestrian Location	PED_LOC	PED-LOCATION	3
Pedestrian/Pedalcyclist	PPPO	PED-TYPE	3
Pedestrian Traffic Control	TR_FUNC1	PED-OBEY	3
Pedestrian Visibility	CTH_CLR	PED-VISIBLE	3
Person Fault Code	PER_FLT	DR-FAULT	2
		PED-FAULT	3
Report Number	CASENO	REPORT-NO	1
Restraint Device	REST1	DR-SAF-EQUIP	2
Restraint Device Problem	RES_PROB	OCC-EQUIP-PROB	4
Seat Position	POS	OCC-SEAT-POS	4
Sex	SEX	DR-SEX	2
		PED-SEX	3
		OCC-SEX	4

NCSA PERSON FILE

MD FIELDS USED

<u>NCSA SAS</u> <u>Variable Description</u>	<u>NCSA SAS</u> <u>Variable Name</u>	<u>MD</u> <u>Variable Name</u>	<u>MD</u> <u>Record Type</u>
Test Type	TEST1	DR-TESTS	2
		PED-TESTS	3
Vehicle Number	VEHNO	OCC-UNIT	4



VARIABLE DEFINITIONS

Below are the 1989 to present Maryland variables and their definitions. Also provided are the SAS variable name and format: N numeric, or C character.

CRASH FILE

Accident Occurred In ACC_OCC
MAARS Lane p. 38

Format: C

Accident Occurred In ACC_OCC identifies the lane in which the crash occurred. Each road is either Northbound-Southbound with North and South lanes or Eastbound-Westbound with East and West lanes. Using the centerline as the point of orientation, identify lanes outward as N, E, S, W1 N, E, S, W2, etc. Use N North and E East with "0" for crash lanes on road that have no lanes marked or in cases where collisions occur straddling the centerline. The code "00" represents "Any location on ramp". The value "PL" represents "Parking Lot". The element in this field can be illustrated as following:

First Position		Second Position	
N	North	#	Lane number
E	East	R	Right turn
S	South	L	Left turn
W	West	A	Acceleration
		D	Deceleration
		S	Shoulder
		X	Crossover
		O	Off road
		G	Gore
		M	Median

Collision Type COL_TYPE
MAARS VEH-VEH Collision Type p. 65

Format: C

Indicates the movement of the motor vehicles at the time of impact. When more than two motor vehicles are involved, collision type is coded for those two vehicles involved in the initial or first collision. Value "16" was dropped, and "00", "88" and "99" codes were added after 1992.

<u>Element Values:</u>	<u>Meaning:</u>
-------------------------------	------------------------

01	Opposite directions, both vehicles going straight, head on.
02	Opposite directions, one vehicle going straight, one vehicle turning left.
03	Same direction, both vehicles going straight, rear-end.
04	Same direction, one vehicle going straight, one vehicle turning right, rear end.
05	Same direction, one vehicle going straight, one vehicle turning left, rear

Element Values: **Meaning:**

	end.
06	Opposite direction, both vehicles going straight, sideswipe.
07	Same direction, both vehicles going straight, sideswipe.
08	Same direction, one vehicle going straight, one vehicle turning right.
09	Same direction, one vehicle going straight, one vehicle turning left.
10	Same direction, both vehicles turning left.
11	Both vehicles going straight, approaching an angle.
12	One vehicle going straight, one vehicle approaching from right, turning right.
13	One vehicle going straight, one vehicle approaching from left, turning left.
14	One vehicle going straight, one vehicle approaching from right, turning left.
15	Opposite directions, both vehicles turning left.
16	Other and single vehicle in transport strikes a parked vehicle.
17	All single motor vehicle collisions.

Added in 1993

00	Not applicable
88	Other
99	Unknown

Construction Zone CONSTRUCT

Format: C

MAARS Construction or Maintenance Zone p. 55

Indicates the absence or presence of construction or maintenance zone at the site of the crash.
This variable is available after 1992.

Element Values: **Meaning:**

N	No
Y	Yes

County Code COUNTY

Format: C

MAARS County p. 33

A two-digit code indicating the county where the crash occurred.

Element Values: **Meaning:**

01	Allegany
02	Anne Arundel
03	Baltimore
04	Calvert
05	Caroline
06	Carroll
07	Cecil
08	Charles
09	Dorchester

Element Values: **Meaning:**

13	Howard
14	Kent
15	Montgomery
16	Prince George's
17	Queen Anne's
18	St. Mary's
19	Somerset
20	Talbot
21	Washington

<u>Element Values:</u>	<u>Meaning:</u>
10	Frederick
11	Garrett
12	Hartford

<u>Element Values:</u>	<u>Meaning:</u>
22	Wicomico
23	Worcester
24	Baltimore City

Date of Accident ACC_DATE Format: C

MAARS Accident Date p.17

Month, day, and year on which the crash occurred. Format prior to 1997 is MMDDYY, where MM is the month, DD is the day and YY is the year. Beginning in 1997, this variable was modified to account for a four-digit year YYYY.

<u>Element Values:</u>	<u>Meaning:</u>
01-12	Month
01-31	Day
YYYY	Last four digits of the year

Day of Week WEEKDAY Format: C

Indicates the day of the week when the crash occurred.

<u>Element Values:</u>	<u>Meaning:</u>
U	Unknown
1	Sunday
2	Monday
3	Tuesday
4	Wednesday
5	Thursday
6	Friday
7	Saturday

First Harmful Event EVENT1 Format: C

MAARS First Harmful Event 1 p. 57

Indicates the first injury or damage-producing event.

<u>Element Values:</u>	<u>Meaning:</u>
1989-1992	
01	Other Motor Vehicle in Transport – Any collision involving at least two motor vehicles in transport upon the same roadway, or upon roadways within an intersection. This includes collision with a motor vehicle stopped or abandoned on the roadway other than in an area designated for parking but does not include collision with a motor vehicle on another roadway.
02	Parked Motor Vehicle – Any collision involving a motor vehicle in transport and a motor vehicle not in transport. This includes legally or illegally parked or standing vehicles where normal usage permits such stopping and also loads in the process of falling from such vehicles. This

Element Values:**Meaning:**

- 03 Motor Vehicles on Other Roadway – Any collision in which a motor vehicle in transport leaves the roadway on which it is in transport and collides with another motor vehicle in transport on another roadway.
- 04 Pedestrian – This does not include a person boarding or alighting, jumping or falling from a motor vehicle in transport.
- 05 Pedalcyclist – Any collision involving a motor vehicle in transport and a pedalcyclist in transport. Pedalcycles include bicycles, tricycles, and unicycles and any trailers or sidecars attached to these cycles. A pedalcyclist is any person riding upon a pedalcycle or in a sidecar attached to a pedalcycle. A stopped pedalcycle is considered to be in transport if it is in readiness for transport.
- 06 Other Conveyance – Any collision involving a motor vehicle in transport and a person who is not classifiable as a pedestrian or as a pedalcyclist.
- 07 Animal – Any collision involving a motor vehicle in transport and an animal, herded or unattended.
- 08 Railway Train – Any collision involving a motor vehicle in transport and a railway train or railway vehicle. This excludes human operated devices on railway tracks and crashes which occur because of derailment or some object or person falling or being thrown from a train.
- 09 Fixed Object – Any collision involving a motor vehicle in transport and a fixed object.
- 10 Other Object – Any collision involving a motor vehicle in transport and any other object that is moveable or moving, but not fixed. This excludes objects set in motion by aircraft, watercraft, or railway; objects set in motion by cataclysm, lightning, or other natural and environmental factors.
- 11 Overturned – Any collision in which a motor vehicle in transport overturns for any reason without an antecedent crash or cause.
- 12 Other non-collision – Any collision involving a motor vehicle in transport other than overturning and collision.

1993-later

- 01 Other Motor Vehicle in Transport – Another motor vehicle in transport
- 02 Parked Motor Vehicle – Another motor vehicle not in transport.
- 03 Pedestrian – Person afoot
- 04 Bicycle – A 2-wheel pedalcycle driven by human power.
- 05 Other Pedalcycle – Although bicycles are the most common pedalcycles, this category includes tricycles, unicycles, and pedalcars.
- 06 Other Conveyance – Person on a non-motorized conveyance that is not a pedalcycle e.g., sidewalk scooter, non-motor wheelchair.
- 07 Railway Train
- 08 Animal – Domestic or wild animal.
- 09 Fixed Object – Any collision involving a motor vehicle in transport and a fixed object.
- 10 Other Object – All collisions that qualify as crashes and are not included in

<u>Element Values:</u>	<u>Meaning:</u>
	the other categories of collision types proper selection of this category will be rare.
11	Overturn – The harmful event is a motor vehicle overturn.
12	Spilled Cargo – The harmful event is injury or damage resulting from a cargo spill.
13	Jackknife
14	Units separated
15	Other non-collision
16	Off road
17	Downhill runaway
18	Explosion or fire
88	Other
99	Unknown

Interchange Ramp Direction RAMP

Format: C

MAARS Ramp Number Direction p. 41

The first direction is the direction the vehicle had been traveling on the roadway feeding the ramp on which the crash occurred. The second direction is the direction of travel that the vehicle would have taken if it had continued off the ramp.

<u>Element Values:</u>	<u>Meaning:</u>
0	Not applicable – Crash did not occur on an interchange ramp.
1	North-West
2	West-North
3	East-North
4	North East
5	South-East
6	East-South
7	West-South
8	South-West
9	Other

Intersection Related INT_REL

Format: C

MAARS Junction p. 56

Indicates if the crash occurred at an intersection.

<u>Element Values:</u>	<u>Meaning:</u>
1989-1992	
1	Non-Intersection
2	Intersection – Crash in which the initial impact occurs within the limits of the intersection.
3	Intersection related – Crash that occurs on the approach to, or exit from, an intersection.
4	Driveway access

Element Values: Meaning:

1993-later

00	Not applicable
01	Non-Intersection
02	Intersection – Crash in which the initial impact occurs within the limit of the intersection.
03	Intersection related – Crash that occurs on the approach to, or exit from, an intersection.
04	Driveway access
88	Other
99	Unknown

Light Condition LIGHT

Format: C

MAARS Light p. 66

General light conditions at the time of the crash.

**Element
Values:
1989-1992**

Meaning:

1	Daylight
2	Dawn
3	Dusk
4	Dark – Street lights on
5	Dark – Street lights off
6	Dark – No lights
7	Unknown

**Element
Values:
1993-later**

Meaning:

00	Not applicable
01	Daylight
02	Dawn/dusk
03	Dark – Lights on
04	Dark – No light
88	Other
99	Unknown

Municipal Code MUN_CODE

Format: C

MAARS Code and Name of Municipality p. 30

Indicates the three-digit number of the municipality if the crash occurred within the limits of an incorporated municipality. For coded values, refer to Appendix A.

Number of Fatalities NUM_FAT

Format: N

Indicates the total number of people fatally injured in the crash.

Number of Injuries NUM_INJ

Format: N

Indicates the number of injured persons, excluding fatally injured, involved in the crash.

Number of Non-Occupants Involved NUM_NOCC

Format: N

Indicates the total number of persons involved in the crash that were not occupants of motor vehicles. This variable is available after 1997.

Number of Vehicles Involved NUM_VEH**Format: N**

Indicates the total number of vehicles involved in the crash, regardless of whether they were in the first impact.

Object Struck 1 OBJECT1**Format: C****MAARS Fixed Object 1 p. 64**

Indicates the fixed object or objects struck. Value "14" was dropped and some codes were added after 1992.

<u>Element Values:</u>	<u>Meaning:</u>
Blank	No fixed object struck
01	Bridge/Overpass
02	Building
03	Culvert/Ditch
04	Curb, wall
05	Guardrail/Barrier
06	Embankment
07	Fence
08	Light support pole
09	Sign support pole
10	Other pole
11	Trees, shrubbery
12	Construction barrier
13	Crash attenuator
14 (1989-1992)	Other

Added in 1993

00	Not applicable
88	Other
99	Unknown

Pedestrian Traffic Control TRA_CON1**Format: C****1989-1992**

Pedestrian Traffic Control indicates the traffic control functioning at the crash scene. Pedestrian Traffic Control 2-4 use the same codes. If no controls were present, then "15" No control present is coded for Pedestrian Traffic Control and Pedestrian Traffic Control 2-4 will be blank.

Pedestrian Traffic Control 2 TRA_CON2**Format: C****Pedestrian Traffic Control 3 TRA_CON3****Format: C****Pedestrian Traffic Control 4 TRA_CON4****Format: C**

<u>Element Values:</u>	<u>Meaning:</u>
01	Police officer
02	RR watchman, gate, etc.
03	Stop and go signal
04	Flashing signal
05	Lane markings
06	Channelization painted
07	Channelization physical
08	Construction/Maintenance controls
09	Warning sign
10	Stop sign
11	Yield sign
12	Center line
13	Edge line
14	Other traffic control present
15	No control present

1993-Later

Pedestrian Traffic Control checks “Yes” or “No” to indicate the presence or absence of a traffic signal which would apply to any traffic unit involved in the crash. Pedestrian Traffic Control 2-4 are not available after 1992.

<u>Element Values:</u>	<u>Meaning:</u>
N	No
Y	Yes

Report Number CASENO

Format: N

MAARS p. 15

Unique number assigned to each crash. This variable appears in all files and is used to merge various information from the files together.

Road Condition RD_CON1

Format: C

MAARS Road Condition p. 43

Indicates the road conditions that existed at the crash at that time. When several undesirable conditions exist, the one least favorable to safety is used.

<u>Element Values:</u>	<u>Meaning:</u>	<u>Element Values:</u>	<u>Meaning:</u>
1989-1992		1993-later	
U	Unknown	00	Not applicable
1	No defects	01	No defects
2	Shoulder defect	02	Shoulder defect
3	Holes, ruts, etc.	03	Holes, ruts, etc.
4	Foreign material	04	Foreign material
5	Loose surface material	05	Loose surface material
6	Obstruction not lighted	06	Obstruction not lighted

<u>Element Values:</u>	<u>Meaning:</u>	<u>Element Values:</u>	<u>Meaning:</u>
7	Obstruction not signaled	07	Obstruction not signaled
8	View obstructed	08	View obstructed
9	Construction/Maintenance	88	Other
		99	Unknown

Road Surface Condition RD_SUR1

Format: C

MAARS Surface Condition p. 54

Indicates the road surface condition at the scene of the crash.

<u>Element Values:</u>	<u>Meaning:</u>	<u>Element Values:</u>	<u>Meaning:</u>
1989-1992		1993-later	
1	Wet	00	Not applicable
2	Dry	01	Wet
3	Snow	02	Dry
4	Ice	03	Snow
5	Mud	04	Ice
6	Other	05	Mud
7	Unknown	88	Other
		99	Unknown

Road Type RD_TYPE

Format: C

MAARS Road Division p. 50

Indicates the highway division and type of median. This variable is available after 1992.

<u>Element Values:</u>	<u>Meaning:</u>
00	Not applicable
01	Not divided
02	One way road or street
03	Divided, median strip without barrier
04	Divided – with barrier
88	Other
99	Unknown

Roadway Character RD_CHAR1

Format: C

MAARS Road Character p. 34

Indicates the vertical and horizontal character of the road at the scene of the crash.

<u>Element Values:</u>	<u>Meaning:</u>	<u>Element Values:</u>	<u>Meaning:</u>
1989-1992		1993-later	
1	Straight – level	00	Not applicable
2	Straight – grade	01	Straight – level
3	Straight – hillcrest	02	Straight – grade
4	Curve-upgrade/Downgrade	03	Straight – hillcrest

<u>Element Values:</u>	<u>Meaning:</u>
5	Curve – grade
6	Curve – hill
7	On bridge
8	Other

<u>Element Values:</u>	<u>Meaning:</u>
04	Curve – level
05	Curve – grade
06	Curve – hill
07	On bridge
88	Other
99	Unknown

Subsequent Event 1 EVENT2

Format: C

MAARS: Harmful Event 2 p. 63

Indicates significant events occurring after the first damage or injury-producing event in order of occurrence. If a pedestrian or pedalcyclist is involved in a subsequent event that exceeds three, then code this and eliminate the least significant of the other subsequent events. For coded values, refer to First Harmful Event.

Time of Accident TIME

Format: N

MAARS Accident Time p. 18

Indicates the time of day the crash occurred.

<u>Element Values:</u>	<u>Meaning:</u>
HHMM	Time in hours and minutes

Weather WEATHER

Format: C

MAARS Weather p. 67

Indicates the weather conditions at the time of the crash.

<u>Element Values:</u>	<u>Meaning:</u>		
1989-1992		1993-later	
1	Clear Cloudy	00	Not applicable
2	Raining	01	Clear/Cloudy
3	Snowing	02	Foggy
4	Fog	03	Raining
5	Blowing dust	04	Snow/Sleet
6	Smoke	05	Severe winds
7	Other	88	Other
8	Sleeting	99	Unknown

VEHICLE FILE

Cargo Body CAGOBODY

Format: C

MAARS Commercial Body Type p. 106

Indicates the commercial vehicle body style. This variable is available after 1992.

<u>Element Values:</u>	<u>Meaning:</u>
00	Not applicable
01	Bus
02	Van/Enclosed box
03	Truck-tractor
04	Cargo tank
05	Flatbed
06	Dump
07	Concrete mixer
08	Auto transporter
09	Garbage/Refuse
88	Other
99	Unknown

Commercial Driver License CDL

Format: C

MAARS CDL? p. 107

Indicates whether the driver has a Commercial Driver License. This variable is available after 1992.

<u>Element Values:</u>	<u>Meaning:</u>
N	No
Y	Yes

Direction of Travel DIR_TRVL

Format: C

MAARS Direction Going p. 93

Indicates the direction of travel for the road the vehicle is traveling on and may not correspond to the compass directions in which the vehicle may have been traveling. For example, if a crash occurs on an S-Curve of a north-south road, the vehicle may actually be oriented east or west. However, the direction of travel is north or south. This is the direction of travel prior to any turns that immediately precede the crash.

<u>Element Values:</u>	<u>Meaning:</u>	<u>Element Values:</u>	<u>Meaning:</u>
1989-1992		1993-later	
0	Unknown	00	Not applicable
1	North	01	North
2	South	02	South

<u>Element Values:</u>	<u>Meaning:</u>	<u>Element Values:</u>	<u>Meaning:</u>
3	East	03	East
4	West	04	West
5	Not applicable – Crash occurred in a parking lot or on the curving ramp of an expressway entrance.	99	Unknown

Driverless DRVLESS

Format: C

Applies to a motor vehicle in transport that does not have a driver in the vehicle at the time of the crash. A person in the vehicle capable of driving but not controlling or attempting to control the vehicle, is not a driver. This variable is available after 1992.

<u>Element Values:</u>	<u>Meaning:</u>
N	No
Y	Yes

Driver's License State DLIC_ST

Format: C

MAARS State p. 95

Indicates the state that issued the license of the driver.

<u>Element Values:</u>	<u>State:</u>	<u>Element Values:</u>	<u>State:</u>
AL	Alabama	NC	North Carolina
AZ	Arizona	ND	North Dakota
AR	Arkansas	OH	Ohio
CA	California	OK	Oklahoma
CO	Colorado	OR	Oregon
CT	Connecticut	PA	Pennsylvania
DE	Delaware	RI	Rhode Island
DC	District of Columbia	SC	South Carolina
FL	Florida	SD	South Dakota
GA	Georgia	TN	Tennessee
HI	Hawaii	TX	Texas
ID	Idaho	UT	Utah
IL	Illinois	VT	Vermont
IN	Indiana	VA	Virginia
IA	Iowa	WA	Washington
KS	Kansas	WI	Wisconsin
KY	Kentucky	WV	West Virginia
LA	Louisiana	WY	Wyoming
ME	Maine	AM	American Samoa Islands
MD	Maryland	CZ	Canal Zone
MA	Massachusetts	CG	Caroline Islands
MI	Michigan	GM	Guam
MN	Minnesota	MH	Marshall Islands
MS	Mississippi	MK	Marianas Islands

<u>Element Values:</u>	<u>State:</u>	<u>Element Values:</u>	<u>State:</u>
MO	Missouri	MW	Midway Islands
NB	Nebraska	PR	Puerto Rico
NV	Nevada	US	U.S. Government vehicle
NH	New Hampshire	VI	Virgin Islands US
NJ	New Jersey	WK	Wake Island
NM	New Mexico	ZZ	All other countries
NY	New York		

Fire FIRE Format: C
 Indicates that a fire occurred either as a first or subsequent event. This variable is available after 1992.

<u>Element Values:</u>	<u>Meaning:</u>
N	No
Y	Yes

Hazardous Material Released CAGOSPIL Format: C
MAARS Hazardous Materials Spill p. 100
 Indicates if any hazardous materials were released either as a cause or a result of the crash. This variable is available after 1992.

<u>Element Values:</u>	<u>Meaning:</u>
N	No
Y	Yes

Hazardous Material Type HAZ_MAT Format: C
 Indicates the Hazardous Materials Number from the placard itself or from authorization documents maintained by the driver. This variable is available after 1992.

Hit and Run HIT_RUN Format: C
 Indicates if the driver of the vehicle involved failed to stop.

<u>Element Values:</u>	<u>Meaning:</u>	<u>Element Values:</u>	<u>Meaning:</u>
1989-1992		1993-later	
1	No	N	No
2	Yes	Y	Yes

Initial Point of Impact IMPACT Format: C
MAARS 1st Impact Pt. p. 116
 Indicates the area of impact. Main Point of Impact became available after 1992 using the same codes as Initial Point of Impact. If the motor vehicle suffered multiple impacts, the first impact

should be considered when selecting the code. It is not necessary for a vehicle to reflect visible damage at the actual or apparent point of impact.

Main Point of Impact IMPACTM

Format: C

Element Values: **Meaning:** **1989-1992**

01	At or around the wheel and fender area, left front
02	At the grille and/or the hood
03	At or around the wheel and fender area, right front
04	At area between fenders and below the roof, left
05	Entire roof area, including convertibles
06	At area between fenders and below the roof, right
07	At or around the wheel and fender area, left rear
08	At the trunk or rear engine compartment
09	At or around the wheel and fender area, right rear
10	Any area on underside excludes body
14	Other
15	None/Unknown

1993-later

00	Not applicable
01	Front left
02	Front right
03	Front right corner
04	Right side front quarter
05	Right side second quarter
06	Right side third quarter
07	Right side rear quarter
08	Rear right corner
09	Rear right
10	Rear left
11	Rear left corner
12	Left side rear quarter
13	Left side third quarter
14	Left side second quarter
15	Left side front quarter
16	Front left corner
17	Hood
18	Roof/Top
19	Trunk
20	Windshield
21	Windows
22	Underside
23	Overtake
88	Other

<u>Element Values:</u>	<u>Meaning:</u>
99	Unknown

Number of Occupants NUMOCC

Format: N

Indicates the total number of casualties/occupants that will be coded for each vehicle in the Person file. This total does not include drivers. If there were no deaths, injuries, or occupants in the vehicle then "0" is coded.

<u>Element Values:</u>	<u>Meaning:</u>
0	No occupants
NN	Total number of occupants

Parked PARKED

Format: C

Indicates if the motor vehicles are parked on a road or elsewhere. This variable is available after 1992.

<u>Element Value:</u>	<u>Meaning:</u>
N	No
Y	Yes

Report Number CASENO

Format: N

A unique number assigned to each crash. This variable appears in all files and is used to merge various information from the files together. The Vehicle file is sorted by Report Number and Vehicle Number VEHNO.

Speed Limit SPDLIM

Format: N

MAARS Speed Limit p. 87

Indicates the speed limit at the scene of the crash. This variable is available prior to 1993 in the Crash file.

<u>Element Values:</u>	<u>Meaning:</u>
88	Other
99	Unknown

Trailer Type TRAILER

Format: C

MAARS Towed Vehs p. 113

Indicates the towed motor vehicle type involved in the crash. Trailer Type is available in 1989-1992. Trailer 1-3 use the same codes as Trailer Type and are available after 1992.

Trailer Type 1 TRAILER1

Format: C

Trailer Type 2 TRAILER2

Format: C

Trailer Type 3 TRAILER3

Format: C

Element Values: **Meaning:**

1989-1992

01-19	Same as Vehicle Type
20	Commercial rig – Trailer of a tractor/trailer unit
21	Tandem trailer – Two-trailer unit attached to a tractor; also known as a “double bottom”
22	Mobile home – Non-motorized mobile home, normally requiring a tractor to move from one location to another
23	Travel/Home trailer
24	Camper
25	Utility trailer
26	Boat trailer
27	Farm equipment
28	Other
29	Unknown

1993-later

00	Not applicable
01	1 semi trailer
02	1 semi + 1 full trailer
03	1 full trailer
04	2 full trailers
05	3 full trailers
06	Automobile
07	Utility trailer
08	Boat trailer
09	Camper
10	Travel/Home trailer
11	Mobile home
12	Farm equipment
88	Other
99	Unknown

Type of Driver's License LIC_TYP

Format: C

MAARS Class p. 96

Indicates the classification code appearing on the operator's license. Two classes can be coded. Value M, coded for Motorcycles, was added after 1992.

Element Values: **Meaning:**

A	All vehicles except motorcycles
B	All vehicles & combination vehicles with GVW or GCW over 25,000

<u>Element Values:</u>	<u>Meaning:</u>
	pounds, except combination class F tractor & Class G trailer & motorcycles.
C	Bus or any vehicle under Class D license
D	All vehicles & combination vehicles except those under Class A, B, C, & E
E, M	Motorcycles
NA	No code appears

U.S. DOT Number USDOTNUM Format: C
MAARS U.S. DOT Number p. 104
A 7-digit number indicating a U.S. Department of Transportation record. This variable is available after 1992.

Vehicle Damage Area 1 VEH_DAM1 Format: C
Indicates the vehicle areas that were damaged. Up to three areas can be coded. Vehicle Damage Areas 2-3 use the same codes. If more than three areas are damaged, then the three most damaged areas are coded. A vehicle does not necessarily fall into the “totaled” category if it has more than three areas damaged. Fire damage is always coded when a fire was present.

Vehicle Damage Area 2 VEH_DAM2 Format: C

Vehicle Damage Area 3 VEH_DAM3 Format: C

<u>Element Values:</u>	<u>Meaning:</u>
1989-1992	
1-10	See Initial Point of Impact under heading 1989-1992.
11	Partial on roof and complete rollovers
12	Totaled – Damage so extensive or severe that repairs would be impractical
13	Fire damage
14	Other
15	Unknown

Vehicle Damage Severity DAM_SEV Format: C
MAARS: Damage Extent p. 123
Indicates the damage extent for the vehicle.

<u>Element Values:</u>	<u>Meaning:</u>
1989-1992	
1	Disabling damage – Any damage to a motor vehicle such that it cannot be driven, or in the case of trailers, towed, from the crash scene in the usual manner, without simple repairs. This includes a vehicle that could be driven, but would be further damaged thereby. It excludes simple tire

<u>Element Values:</u>	<u>Meaning:</u>
	disablement, even if a spare tire is not available; and damage to lights that would make night driving hazardous, but would not affect daytime driving.
2	Functional damage – Any damage to a motor vehicle that affects its operation or the functioning of its parts, but is not disabling. This includes tire damage, even though the tire may be changed at the scene.
3	Other vehicle damage – Any damage to a motor vehicle, which is neither disabling, nor interferes with the function of the vehicle. Such damage usually affects either the appearance of the motor vehicle or the load on the motor vehicle. This excludes mud or dirt on the motor vehicle.
4	No damage
5	Unknown
1993-later	
00	Not applicable
01	No damage
02	Superficial or minor damage – Any damage to a motor vehicle excluding disabling or functional damage which reduces the monetary value of that property.
03	Functional damage
04	Disabling damage
05	Destroying damage
88	Other
99	Unknown

Vehicle Identification Number VIN Format: C
MAARS Vehicle ID Number VIN p . 121
A combination of alphanumeric characters that uniquely identifies a vehicle.

Vehicle License State VLIC_ST Format: C
MAARS YR Registration # & State p. 118
Indicates the state the vehicle license plate was issued. Refer to Driver's License State for codes.

Vehicle Make MAKE Format: C
MAARS Year & Make of Vehicle P. 114
Indicates vehicle manufacturer, or in cases like General Motors, the major manufacturing division within the parent company.

<u>Element Values:</u>	<u>Meaning:</u>
CCCC	Manufacturer's name or abbreviation

Vehicle Maneuver VEH_MAN1

Format: C

MAARS Movement p. 77

Indicates the vehicle maneuver just prior to impact. Value “18” was dropped after 1992 and codes “00”, “88” and “99” were added.

Element Values: Meaning:**1989-1992**

01	Moving constant speed
02	Accelerating
03	Slowing or stopping
04	Starting from traffic lane
05	Starting from parked position
06	Stopped in traffic lane
07	Changing lanes
08	Passing
09	Parking
10	Parked
11	Backing
12	Making left turn
13	Making right turn
14	Making right turn on red
15	Making U-turn
16	Skidding
17	Driverless moving vehicle
18 (1989-1992)	Other/Unknown

Added in 1993

00	Not applicable
88	Other
99	Unknown

Vehicle Model MODEL

Format: C

MAARS Model p. 115

Indicates the vehicle model’s name, abbreviated name, or number

<u>Element Values:</u>	<u>Meaning:</u>
CCCCCCCC	Vehicle model

Vehicle Most Harmful Event VEVENT1

Format: N

MAARS VEH Most Harmful Event p. 108

Indicates the most harmful event that occurred to this vehicle. This variable is available after 1992 and all codes are used as First Harmful Event.

Vehicle Number VEHNO

Format: N

MAARS Unit # p. 70

A number assigned to each vehicle in the crash. This variable is used to merge information from the Person file with the Vehicle file so that people involved in the crash can be placed in a specific vehicle. The Vehicle file is sorted by Report Number CASENO and Vehicle Number.

Vehicle Type VEH_TYPE

Format: C

MAARS Body Type p. 102

Indicates body type of the vehicle. Values “28” and “29” were dropped and some new value codes were added after 1992.

Element Values: **Meaning:**

1989-1992

01	Motorcycle – A motor vehicle having a saddle for the use of the operator and designed to travel on not more than three wheels in contact with the ground, including motor scooter.
02	Automobile
03	Station wagon
04	Limousine – Any large, luxurious sedan, usually one driven by a chauffeur.
05	Light-duty truck – Any truck up to and including $\frac{3}{4}$ ton.
06	Heavy-duty truck – Any truck larger than $\frac{3}{4}$ ton, excluding tractor/trailer.
07	Truck/Road tractor – Any motor vehicle designed and used primarily for drawing other vehicles, and not constructed to carry a load other than a part of the weight of the vehicle.
08	Recreation vehicle – Self-contained motorized mobile home.
09	Farm vehicle
10	Transit bus – Commercial buses used for local transit.
11	Cross-country bus – Commercial buses used for interstate transit.
12	School bus – Privately or municipally owned buses used primarily for transporting students.
13	Ambulance/emergency
14	Ambulance/non-emergency
15	Fire vehicle/emergency
16	Fire vehicle/non-emergency
17	Police vehicle/emergency
18	Police vehicle/non-emergency
19	Moped – A bicycle that is operated with assistance of a motor that has less than 50-cubic centimeters piston displacement or rated less than one-brake horsepower.
28 (1989-1992)	Other
29 (1989-1992)	Unknown

<u>Element Values:</u>	<u>Meaning:</u>
Added in 1993	
00	Not applicable
20	Pickup truck
21	Van
88	Other
99	Unknown

Vehicle Year MOD_YR

Format: C

MAARS Included in Year & Make of Vehicle P. 114 and YR Registration # & State p. 118

Identifies the model year of the vehicle. Beginning in 1997, this variable was modified to permit coding a four-digit year.

<u>Element Values:</u>	<u>Meaning:</u>
NNNN	Actual year
U	Unknown

PERSON FILE

Age AGE

Format: N

MAARS Age p. 131

Indicates the person's age at the time of the crash. The value "999" coded for "Unknown" was added after 1992.

<u>Element Values:</u>	<u>Meaning:</u>
0	Less than 1 year old
NN	Age
999 (1992-later)	Unknown

Alcohol/Drug Use ALC_DRUG

Format: C

MAARS: Substance Use Detected p. 79

Indicates the presence and the contribution of controlled substances. This variable is available after 1992.

<u>Element Values:</u>	<u>Meaning:</u>
00	Not applicable
01	None detected
11	Alcohol present
12	Illegal drug present
13	Medication present
14	Combined substance present
21	Alcohol contributed
22	Illegal drug contributed
23	Medication contributed
24	Combination contributed
88	Other
99	Unknown

Alcohol Test Results TST_RES1

Format: C

MAARS BAC TEST Result p. 81

Indicates the results of the alcohol test. Coded for drivers, pedestrians, and pedalcyclists.

<u>Element Values:</u>	<u>Meaning:</u>	<u>Element Values:</u>	<u>Meaning:</u>
1989-1992		1993-later	
Blank	Not applicable	00	Not applicable
.NN	Test results	.NN	Test results

Driver/Pedestrian Condition PERCOND**Format: C****MAARS Condition p. 78**

Indicates the condition of each driver/pedestrian at the time of the crash. This variable is available after 1992.

<u>Element Values:</u>	<u>Meaning:</u>
00	Not applicable
01	Apparently normal
02	Had been drinking
03	Had been using drugs
04	Physical defects
05	Other handicaps
06	Ill
07	Fatigued
08	Apparently asleep
88	Other
99	Unknown

Driver/Pedestrian Date of Birth DOB**Format: C****MAARS Date of Birth p. 98**

Indicates the Date of Birth as it appears on operator's license or as professed by the person. Only coded for drivers, pedestrians, and pedalcyclists 1989-1992. Only coded for drivers 1993 and later. Format prior to 1997 is MMDDYY, where MM is the month, DD is the day and YY is the year. Beginning in 1997, this variable was modified to permit coding a four-digit year.

Driver/Ped Contributing Circumstance 1 CON_CIR1**Format: C****MAARS Contributing Circumstance #1-4 p. 110-111**

Indicates the first contributing circumstance for the driver/pedestrian. Up to four different contributing circumstances can be coded for each driver/pedestrian. Driver/Ped Contributing Circumstance 2-4 code the same information. These variables are available after 1992.

Driver/Ped Contributing Circumstance 2 CON_CIR2**Format: C****Driver/Ped Contributing Circumstance 3 CON_CIR3****Format: C****Driver/Ped Contributing Circumstance 4 CON_CIR4****Format: C**

<u>Element Values:</u>	<u>Meaning:</u>
00	Not applicable

Driver, Pedestrian, Cyclist Condition or Action

01	Under the influence of drugs
02	Under the influence of alcohol

Element Values:**Meaning:**

03	Under influence of medication
04	Under combined influence
05	Physical/Mental difficulty
06	Fell asleep, fainted
07	Failed to give full time and attention
08	Did not comply with license restrictions
11	Failed to yield right-of-way
13	Failed to obey traffic signal
14	Failed to obey other traffic control
15	Failed to keep right of center
16	Failed to stop for school bus
17	Wrong way on one-way road
18	Exceeded speed limit
21	Too fast for conditions
22	Followed too closely
23	Improper turn
24	Improper lane change
25	Improper backing
26	Improper passing
27	Improper signal
28	Improper parking
29	Interference/Obstruction by passenger

Pedestrian, Cyclist Action Only

31	Illegally in roadway
32	Bicycle violation
37	Clothing not visible

Environmental Effect

41	Smoke, smog
42	Sleet, hail, freezing rain
43	Blowing sand, soil, dirt
44	Severe crosswinds
45	Rain, snow
46	Animal
47	Vision obstruction including blinded by sun or light

Vehicle defect

51	Brakes
52	Tires
53	Steering
54	Lights
55	Windows/Windshield
56	Wheels
57	Trailer coupling

<u>Element Values:</u>	<u>Meaning:</u>
58	Cargo

Road Condition

61	Wet
62	Icy or snow-covered
63	Debris or obstruction
64	Ruts, holes, bumps
65	Road under construction/maintenance
66	Traffic control device inoperative
67	Shoulders low, soft, high

Ejection EJECT

Format: C

MAARS Ejection p. 90

Indicates if the person was ejected from the vehicle. Only coded for drivers and passengers. One-digit values have been replaced with two-digit values after 1992, and are shown in the separate column below. Value "00" for "Not applicable" and value "88" for "Other" were added after 1992.

<u>Element Values:</u> 1989-1992	<u>Element Values:</u> 1993-later	<u>Meaning:</u>
1	01	Not ejected – Person was completely within the motor vehicle after the crash stabilized, but was not trapped.
2	02	Fully ejected – Person was thrown completely clear of the motor vehicle by the force of an impact, or as a result of the crash.
3	03	Partially ejected – Person was positioned partially within the vehicle and partially outside.
4	04	Trapped – Person was completely within the motor vehicle after the crash stabilized because of functional damage to the vehicle and not of his own violation.
5	99	Unknown
	00	Not applicable
	88	Other

Injury Severity INJ

Format: C

MAARS Injury Severity p. 75

Indicates person's injury according to the most severe characteristic. One-digit values have been replaced with two digit values after 1992.

<u>Element Values:</u> 1989-1992	<u>Element Values:</u> 1993-later	<u>Meaning:</u>
1	01	No injury – When there is no reason to believe that the occupant suffered any bodily harm as a result of the motor vehicle crash.
2	02	Possible injury – Any injury, reported or claimed, which is not fatal, incapacitating, or non-incapacitating.
3	03	Non-incapacitating – Any evident injury, other than fatal and incapacitating, which is evident to any person, other than the injured, at the scene of the crash.
4	04	Incapacitating injury – any injury, other than fatal, which prevents the injured person from walking, driving, or normally continuing the activities that he was capable of performing prior to the motor vehicle accident.
5	05	Fatal – Any injury sustained in an accident, or as a result of the crash, that causes the death of the injured occupant.

Pedestrian Action PED_ACT

Format: C

Indicates the pedestrian's/pedalcyclist's maneuver or activity immediately prior to the time he was struck. Painted crosswalks between "physical intersections" are considered as intersections for this section. An example of this would be pedestrian/pedalcyclist crossings in the middle of the block. Legitimate crosswalks at an intersection are also considered as a part of the intersection. The term "road" includes the roadway and its shoulders, but not curbs and sidewalks. If a pedestrian/pedalcyclist is struck on the sidewalk or on a lawn off roadway, then value "12" is used. Value "00" coded for "Not applicable" was added after 1992.

<u>Element Values:</u> 1989-1992	<u>Element Values:</u> 1993-later	<u>Meaning:</u>
	00	Not applicable
01	51	Crossing/Entering roadway at intersection
02	52	Crossing/Entering roadway not at intersection
03	53	Walking/Riding on road with traffic
04	54	Walking/Riding on road against traffic
05	55	Playing
06	56	Standing
07	57	Getting on/off vehicle
09	59	Other working
10	60	Hitch-hiking
11	61	Approaching/Leaving school bus
12	88	Other
13	99	Unknown

Pedestrian Location PED_LOC
MAARS Ped Location p. 84

Format: C

Indicates the pedestrian's/pedalcyclist's location at the time he was struck. This selection should be made without concern for the activities of the pedestrian/pedalcyclist at the time he was struck. One-digit values have been replaced with two-digit values after 1992. Value "00" for "Not applicable" and value "88" for "Other" were added after 1992.

<u>Element Values:</u>	<u>Element Values:</u>	<u>Meaning:</u>
1989-1992	1993-later	
1	01	Shoulder
2	02	Curb
3	03	Sidewalk
4	04	Outside right of way
5	05	On roadway at crosswalk
6	06	On roadway not at crosswalk
7	07	School bus zone
8	08	Bikeway
9	99	Unknown
	00	Not applicable
	88	Other

Pedestrian/Pedalcyclist PPPO
MAARS Ped Type p. 83

Format: C

Indicates pedestrian, pedalcyclists, and other persons who are not occupants of motor vehicles.

<u>Element Values:</u>	<u>Meaning:</u>
1989-1992	
Blank	Driver and passenger
1	Pedestrian
2	Pedalcyclist
1993-later	
00	Not applicable
01	Pedestrian
02	Bicyclist
03	Other pedalcyclist
04	Rider of animal
05	In animal-drawn vehicle
06	Machine operator/rider
07	Other conveyance
88	Other
99	Unknown

Pedestrian Visibility CTH_CLR
MAARS Ped Visibility p. 86

Format: C

Indicates the appearance of the pedestrian's/pedalcyclist's clothing to the vehicle traffic, considering light conditions. Codes 1-4 describe clothing of pedestrians and pedalcyclists in the daytime. Codes 4-7 describe their clothing at night.

<u>Element Values:</u> 1989-1992	<u>Element Values:</u> 1993-later	<u>Meaning:</u>
U		Unknown
	00	Not stated
1	01	Light clothing
2	02	Dark clothing
3	03	Mixed clothing
4	04	Retro-reflective material
5	05	Headlight
6	06	Rear light reflector
7	07	Headlight & rear light reflector
	88	Other
	99	Unknown

Person Fault Code PER_FLT
MAARS At Fault p. 92

Format: C

Indicates whether the driver or pedestrian was at fault. This variable is available after 1992.

<u>Element Values:</u>	<u>Meaning:</u>
Y	Yes
N	No

Report Number CASENO

Format: C

A unique number assigned to each crash. This variable appears in all files and is used to merge various information from files together. The Person file is sorted by this Report Number and Vehicle Number VEHNO.

Restraint Device REST1

Format: C

MAARS Safety Equipment Used p. 88

Indicates the restraint device in use at the time of the crash. Only coded for drivers and passengers. This variable is only available for 1989-1992 and changed in 1993.

<u>Element Values:</u> 1989-1992	<u>Meaning:</u>	<u>Element Values:</u> 1993-later	<u>Meaning:</u>
01	Lap belt	00	Not applicable
02	Harness only	01	None

Element
Values:
1989-1992

03	Belt and harness
04	Child restraint
05	Air bag or passive restraint
06	Helmet
07	Eye protection only
08	Helmet and eye protection
09	Other
10	None used
11	None available
12	Usage unknown

Element
Values:
1993-later

11	Lap belt only
12	Shoulder belt only
13	Shoulder/lap belts
14	Child/youth restraint
21	MC/bike helmet
22	MC/bike eye shield only
23	MC/bike helmet and shield
31	Air bag only
32	Air bag and belts
88	Other
99	Unknown

Restraint Device Problem RES_PROB

Format: C

MAARS Driver Equipment Problem p. 89

Indicates the failure and misuse of restraint devices.

Element Values:

00

Meaning:

Not applicable

Adult/Youth

01	No misuse
11	Belt/Anchors broke
13	Belts misused
31	Air bag failed

Child

42	Facing wrong way
43	Not anchored right
44	Anchor not secure
45	Not strapped right
46	Strap/Tether loose
47	Size/Type improper
88	Other
99	Unknown

Seat Position POS

Format: C

MAARS Seat Position p. 128

Occupants' seat position before the crash occurred. Any person seated or being held on the lap of another will be given the same seating position as the person on whose lap they are seated or being held. If more than three persons are seated abreast in the front or rear seats of a two-seat vehicle, all inboard occupants will be coded as being in the center position values "2" or "5". For motorcycles and mopeds, passengers not in sidecars will be coded in rear left position value "4".

Passengers in sidecars will be coded in the right front positions value “3”. After 1992 element values were converted to double digits. Values “07”, “08” and “09” were altered and values “00”, “88” and “99” were added in 1993.

Element Values: **Meaning:**

1989-1992

0	Pedestrian and pedalcyclist
1	Driver
2	Front center
3	Front right
4	Rear left
5	Rear center
6	Rear right
7	Other – Examples include: passenger in rear of pickup or camper
8	Outside vehicle
9	Bus occupants

1993-later

00	Pedestrian and pedalcyclist
01	Driver/Motorcycle operator
02	Center front seat
03	Right front seat
04	Left rear/motorcycle passenger
05	Center rear seat
06	Right rear seat
07	Other in vehicle
08	Cargo area
09	Outside vehicle
10	Passenger – left front seat only/lap
88	Other
99	Unknown

Sex SEX

Format: C

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Indicates the sex of the person. After 1992 element values were converted to double digits and value “99” for “Unknown” was added.

Element Values: **Element Values:** **Meaning:**

1989-1992

1993-later

1	01	Male
2	02	Female
	99	Unknown

Test Type TEST1

Format: C

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Indicates the most appropriate type for alcohol/drug test given. This variable is available after 1992.

<u>Element Values:</u>	<u>Meaning:</u>
00	Not applicable
01	Test refused
02	Positive preliminary test
03	Evidence test given
88	Other
99	Unknown

Vehicle Number VEHNO

Format: N

A number assigned to each vehicle in the crash. This variable is used to merge information from the Person file with the Vehicle file so that people involved in the crash can be placed in a specific vehicle. The Person file is sorted by the Report Number CASENO and Vehicle Number. Value "99" coded for Unknown was added after 1992.